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09/485,675	02/24/2000	TAKESHI OGINO	015358/0104	9758

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EXAMINER

WACHTEL, ALEXIS A

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 12/05/2002

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s) <i>AF 10</i>	
	09/485,675	OGINO ET AL.	
	Examiner Alexis Wachtel	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 06 September 2002.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 16-35 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 16-35 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. _____.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____ .

2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . 6) Other: _____ .

Detailed Action

Response to Amendment

1. Applicant's amendment and accompanying Remarks filed 9-6-2002 have been entered and carefully considered.

The amendment is sufficient to overcome the obviousness rejections of claims 1-15 and the 112 1st and 2nd paragraph rejections of claims 1-15 since the claims have been cancelled. However, an updated search yielded new prior art that provides a new basis of rejection as shown below. Applicant's arguments are rendered moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 17-20,23,28 and 31 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claims as currently written claim a polyacrylate-series fiber, but the Specification on pp.6 discloses polyacrylonitrile -series fibers and crosslinked acrylic fibers which are not equivalent to polyacrylate-series fibers. At best, Applicant's specification discloses a "polyacrylonitrile reaction product" that is not claimed. Thus polyacrylate-series fibers are not enabled by the Specification.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 16 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. With regards to claim 16, Applicant does not clearly describe what is meant by phrase "at least 50ml of air per gram of moss". Moss is assumed to reference "mass". What is the air's volume being referenced against? Is it against the mass of the feather?

8. With regards to claim 21 Applicant identifies the "heat retaining fiber" as "feather." Feathers are **not** fibers. Examiner acknowledges Applicant's use of a dictionary in order to apply a broad definition of fiber such that the term "feather" is encompassed. However, Applicant provides an unacceptable definition given the context of the specification. Since Applicant has not defined "fiber" in the specification, Examiner relies on the art recognized definition of the term that is most appropriate given Applicant's context and usage of the term, which is a slender and greatly elongated natural or synthetic filament capable of being spun into yarn. Examiner strongly suggests that Applicant change language of claim to address this discrepancy.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 16-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB2000440A in view of JP 06294006A and US 6,112,328 to Spector.

Examiner Note: with regards to claim 16, it has been held that the functional "whereby" statement does not define any structure and accordingly cannot serve to distinguish. *In re Mason*, 114 USPQ 127, 44 CCPA 937 (1957).

GB2000440A discloses a filler for quilts, pillows, cushions, sleeping bags, ski jackets wherein said filler is composed of feathers and fibers (pp. 1, col 1, lines 5-9). Said filler consists of a substantially homogenous mixture of feathers and fibers comprising from 0.1% to 40% by weight of fibers of said mixture and from 99.9% to 60% by weight of feathers by blending means whereby a substantially homogeneous distribution of fibers among feathers is produced. Examiner note: GB2000440A does not mention a binder used in the blending process. Said fibers are preferably made of polyacrylonitrile (Abstract). The filler material is blended so that the filler components are homogenously blended (pp. 2, lines 29-51)

Although GB2000440A does not explicitly teach the claimed air density or loft of the feathers, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. feathers). The burden is upon the Applicant to prove otherwise. In the alternative, the claimed air density or loft of the heat retaining fibers would obviously have been provided by the process disclosed by GB2000440A.

Although GB2000440A as set forth above teaches that the inventive filler can be used in sleeping bags, jackets, etc., GB2000440A fails to teach the filler material

used as an intermediate material with the claimed article structure wherein said article is waterproof, water vapor permeable, and windproof. Spector is directed to a light weight fabric for producing outerwear garments. The fabric is composed of inner and outer skins formed of woven synthetic plastic fibers, such as nylon, which render the skins water resistant, yet permeable to vapor whereby the fabric is breathable. Examiner note: the woven synthetic fiber structure is assumed to have a degree of windproofness because of its water resistance which serves to prevent fluid penetration. Sandwiched between the skins is a layer of polyester fiberfill which imparts thermal insulation-characteristics to the fabric (Abstract). In view of this teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have replaced the fiberfill in Spector's fabric with the homogenously blended fibers (polyacrylonitrile fibers) and heat retaining fibers (feathers) of GB2000440A which would be used as an intermediate material to be placed in between the inner and outer skins of the fabric structure suggested by Spector, motivated by the desire to obtain an article of clothing suitable for cold weather applications. Examiner Note: The method limitations of drying or humidifying said fibers are not given weight in the article claims since the final product will still be an article with a filler material disposed within it.

GB2000440A and Spector as set forth above fails to teach the use of moisture absorbing heat releasing fibers. JP 06240064A is directed to insulation used in clothing such as skiwear (pp.1, [0002], lines 1-4) and teaches that it is known to use heat releasing moisture absorbing fibers such as "N-38 Toyobo Co., Ltd" (pp.2, [0015], lines 12-15) for their ability to generate heat on contacting moisture, thus making articles,

such as skiwear much more comfortable (pp.3 and 4, [0022], lines 1-4, [0023], lines 1-5, [0024], lines 1-12). In view of this teaching, it would have been obvious for one of ordinary skill in the art to have substituted a heat releasing moisture absorbing fiber such as "N-38 Toyobo Co., Ltd" for the polyacrylonitrile fiber used by GB2000440A motivated by the desire to obtain a superior outerwear insulation that would keep a user comfortable.

Regarding claims 17-20, since Applicant clearly discloses using "N-38 Toyobo Co., Ltd" as the heat releasing moisture absorbing fibers it is reasonable to assume that all of the method limitations associated with the production of said fibers are inherently provided by virtue of "N-38 Toyobo Co., Ltd" being Applicant's desired fibers. Absent evidence to the contrary, the "N-38 Toyobo Co., Ltd" fiber discussed by Applicant are assumed to be identical to the "N-38 Toyobo Co., Ltd" fibers disclosed by JP 06240064A.

Regarding claims 28,29,31 and 32, since Applicant makes specific exemplary use of "N-38 Toyobo Co., Ltd" fibers, the claimed chemically manipulative steps are presumed as having been carried out in creating the "N-38 Toyobo Co., Ltd" fibers. Should Applicant contest this assertion, alternate and chemically dissimilar manipulative steps must be provided as evidence in order to overcome the rejection of claims 28,29,31 and 32.

Regarding claims 27,30,33 and 34, GB2000440A, Spector and JP 06240064A fails to teach that the moisture-absorbent/heat generating fibers and heat retaining fibers are blended under the condition of the moisture-absorbent/heat generating fibers

dried to an inherent minimum moisture content, **or**, that the moisture-absorbent/heat generating fibers and heat retaining fibers are blended under the condition of the moisture-absorbent/heat generating fibers are dried to an inherent minimum moisture content wherein the drying step involves drying via heat or hot air, then cooling, with dry air the moisture-absorbent/heat generating fibers dried to an inherent minimum moisture content, **or** that the moisture-absorbent/heat generating fibers and heat retaining fibers are blended under the condition of the moisture-absorbent/heat generating fibers and the heat retaining fibers are dried to an inherent minimum moisture content wherein the drying step involves drying via heat or hot air, then cooling, with dry air the moisture-absorbent/heat generating fibers to an inherent minimum moisture content. However, it would have been obvious to one ordinary skill in the art at the time the invention was made to have dried the fibers to an inherent minimum moisture content motivated by the desire to decrease the weight of the fibers and prevent them from clumping together before mixing. The textile industry prepares fibers in a stable, controlled environment wherein the humidity can be suitably changed to optimize fiber processing. Variations of the drying steps that Applicant claims as novel are obvious variations that solve the problem of drying the fibers.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Alex Wachtel, whose number is (703)-306-0320. The Examiner can normally be reached Mondays-Fridays from 10:30am to 6:30pm.

If attempts to reach the Examiner by telephone are unsuccessful and the matter is urgent, the Examiner's supervisor, Mr. Terrel Morris, can be reached at (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



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